

**UNITED STATES DISTRICT COURT
DISTRICT OF MINNESOTA**

John R. Wilson and Wilson Wolf
Manufacturing Corporation,

Civil No. 13-210 (DWF/FLN)

Plaintiffs,

v.

**MEMORANDUM
OPINION AND ORDER**

Corning, Inc.,

Defendant.

Christopher A. Young, Esq., Devan V. Padmanabhan, Esq., Sri K. Sankaran, Esq., Tiffany A. Blofield, Esq., and Paul J. Robbennolt, Esq., Winthrop & Weinstine, PA, counsel for Plaintiffs.

Bradley R. Love, Esq., Jeff M. Barron, Esq., Paul Bryan Hunt, Esq., and Annamarie A. Daley, Esq., Barnes & Thornburg LLP, counsel for Defendant.

INTRODUCTION

This matter is before the Court on a Motion for Partial Summary Judgment Regarding (1) Breach of Contract and (2) Incorrect Inventorship Regarding U.S. Patent No. 7,745,209 (the “209 Patent”) brought by Plaintiffs John R. Wilson (“Wilson”) and Wilson Wolf Manufacturing Corp. (“Wilson Wolf”) (together, “Plaintiffs”) (Doc. No. 320), and a Motion for Summary Judgment on Plaintiffs’ Unjust Enrichment Claims and Partial Summary Judgment on Plaintiffs’ Trade Secret Misappropriation Claims brought by Defendant Corning, Inc. (“Corning”) (Doc. No. 307).

For the reasons discussed below, the Court denies Plaintiffs' motion and grants Corning's motion.

BACKGROUND

This action involves technologies for cell culture, which is the growth of cells in a laboratory environment. In this case, Plaintiffs allege that Corning obtained Plaintiffs' cell culture technology under a confidentiality agreement and subsequently filed for and obtained patents claiming Plaintiffs' technology as its own. (Doc. No.1 ("Compl." ¶¶ 125-140.) Related to these allegations, Plaintiffs assert claims for Breach of Contract (Count IV), and Unjust Enrichment and Constructive Trust (Count V). *Id.* Plaintiffs also allege that Wilson Wolf employees should be named as inventors on three Corning patents—the '209 Patent, U.S. Patent No. 8,178,345, and U.S. Patent No. 8,273,572. (*Id.* ¶¶ 102-24.) Finally, Plaintiffs assert a claim for Misappropriation of Trade Secrets, Minn. Stat. § 325C.01 (Count VI). (*Id.* ¶¶ 141-163.)¹

Wilson is the founder and CEO of Wilson Wolf. (Doc. No. 315 ("Wilson Decl.") ¶ 3.) Wilson Wolf is a biotechnology firm located in New Brighton, Minnesota, that develops and manufactures cell culture devices and, in particular, cell culture devices that "bridge the gap" between traditional cell cultureware (such as T-flasks and roller bottles) and more complex systems. (*Id.* ¶ 7.) Wilson Wolf systems are used in many types of

¹ Plaintiffs originally alleged that Corning infringed two of Plaintiffs' patents—U.S. Patent No. 8,158,426 (the "426 Patent") and U.S. Patent No. 8,158,427 (the "427 Patent"). (*Id.* ¶¶ 164-71.) However, those claims were previously dismissed. (Doc. No. 299.)

cell therapy treatments, including immunotherapy for various cancers, Type 1 diabetes, and autoimmune diseases. (*Id.* ¶ 13.)

Corning is a multi-national corporation that operates several divisions in areas of technology, including life sciences, display technologies, and environmental technologies. (Doc. No. 314 (“Young Decl. I”) ¶ 3, Ex. 2.) In 2003, a representative of Corning’s Life Sciences division visited a Wilson Wolf booth at a trade show in San Francisco that was operated by Wilson. (*Id.* ¶ 4, Ex. 3 (“Walsh Dep.”) at 24-25.) Wilson invited Corning to visit Wilson Wolf in Minnesota to learn more about Wilson Wolf’s cell culturing. (*Id.* at 27.)

On January 6, 2004, the parties entered into a Confidential Disclosure Agreement (“CDA”). (Compl. ¶ 41, Ex. C (“CDA”).)² The CDA, which included a Minnesota choice of law provision and was effective for two years, permitted “exchanges of information which may be confidential for the purpose of enabling [Wilson Wolf] to provide design, engineering or other services for Corning.” (*See generally* CDA and CDA ¶ 8.) The CDA provided that:

“Confidential Information” shall mean only that information relating to selling, inventing, and developing cell culture devices and processes for growing cells . . . and information relating to expertise in inventing and developing cell culture devices and processes for growing cells

(*Id.* ¶ 1). Further, the CDA provided:

² The CDA was executed by Corning, Wilson Wolf, and Wilson Wolf Corporation. (CDA at 4.) Wilson signed the CDA as a corporate representative of Wilson Wolf and Wilson Wolf Corporation. (*Id.*)

All Confidential Information shall be disclosed to the receiving party in a writing reasonably identifying it as confidential or, if first orally or visually disclosed, shall be identified confidential in a writing delivered to the receiving party within thirty (30) days of first oral or visual disclosure.

(*Id.* ¶ 2.)

Pursuant to the CDA, once Confidential Information was disclosed, it was to be treated as Confidential for five years from the date of disclosure. (*Id.* ¶ 3.) The party receiving Confidential Information was required to:

- a) limit the dissemination of received Confidential Information within its organization to only those employees having a need for access,
- b) protect Confidential Information from disclosure to third parties with at least the same degree of care (but no less than a reasonable degree of care) as it uses to protect its own Confidential Information of like kind from unauthorized use or disclosure, and
- c) not use received Confidential Information for any purpose other than for the express purpose recited above.

(*Id.*) The CDA also covered how a party should treat information disclosed as Confidential when that party believed the information is not actually confidential; for example, in situations where information designated Confidential was developed by the receiving party by employees not exposed to Confidential Information or was publicly available. (*Id.* ¶ 4 (a)-(d).) Even so, in such a situation, the receiving party could not use or disclose any Confidential Information “without first notifying the other party in writing of its intended reliance [on any of the foregoing exemptions] at least fourteen (14) days in advance of use or disclosure.” (*Id.*)

On or around March 3, 2004, Corning representatives traveled to Minnesota to meet Wilson at Wilson Wolf headquarters. (Young Decl. I ¶¶ 5, 6, Exs. 4, 5.) Plaintiffs contend that, at the meeting, Wilson disclosed the results of Wilson Wolf’s research

regarding the use of gas permeable technologies in tissue and cell culture vessels. The information disclosed included Wilson Wolf innovations that included various combinations of features, including for example, a static cell culture device, with multiple shelves or scaffolds, gas permeable materials, no gas liquid interface, unconventional medium height, and medium height more than 2.0 cm from the bottom of the device. (*Id.* ¶ 8, Ex. 7 at Answer No. 1.) Plaintiffs contend that this information was disclosed both in person and in documents labeled “CONFIDENTIAL INFORMATION PROVIDED BY WILSON WOLF” at the March 2004 meeting. (*Id.* ¶ 10, Ex. 9.) Wilson Wolf also provided Corning with documents designated “Confidential” that disclosed combined features and noted patent protection expected from a U.S. Provisional Application filed by Wilson and co-inventors. (*Id.*) Wilson Wolf also identified and disclosed certain product designs and concepts, including a design for the “multi-layer flask,” along with a drawing and detailed description of the multi-layer flask concept (also referred to as the Enhanced Roller Bottle, Gas Transfer Fixture, and Wilson Wolf Flask). (Wilson Decl. ¶ 9; Young Decl. I ¶ 6, Ex. 5.) Wilson Wolf noted that the multi-layer flask design could provide “10X-20X [greater cell yield] relative to T-175 [flasks].” (Doc. No. 324 (“Young Decl. II”) ¶ 2, Ex. 63 at COR009287.)

At the meeting, Corning requested prototypes for testing. (Young Decl. I ¶ 11, Ex. 10.) Wilson Wolf provided Corning with two “Vertical Bag” prototypes and two multi-layer flasks with gas permeable material. (*Id.* ¶¶ 12, 13, Exs. 11, 12.) Wilson described the virtues of the multi-layer flask, and on May 10, 2004, sent two Gas Transfer Fixtures to Corning. (*Id.*)

Corning tested some of the Wilson Wolf prototypes and decided to explore the opportunity to add a gas permeable membrane to their portfolio. (*Id.* ¶¶ 14-17, Exs. 13-16.) Corning set up a second meeting with Wilson at Corning's facilities in Kennebunk, Maine on August 25, 2004. (*Id.* ¶ 18, Ex. 17.) During this meeting, the parties discussed Wilson Wolf's product development efforts, Wilson's intellectual property, the results of Corning's testing of Wilson Wolf's products, and “[p]roduct options for best alignment of Corning's and Wilson Wolf's capabilities.” (*Id.*) After the August 25, 2004 meeting, Dr. Allison Tanner (“Dr. Tanner”), a Corning Product Development scientist, who would later be the technical lead on Corning's development of the HYPERFlask Cell Culture Vessel product (“HYPERFlask”), prepared a synopsis titled “Wilson Wolf Product Overview”:

(A) Provisional Patent Application- “**Cell Culture Methods and Devices Utilizing Gas Permeable Materials**” suggests using gas permeable material . . . in the construction (bottom and/or sides) of . . . multi-layered flasks . . . Patent application allows for medium height to be great[e]r than other gas permeable cell culture devices.

There are 2 basic premises to all these devices: 1) The use of gas permeable material allows multiple scaffolds to increase surface area in a given footprint and a higher height of medium than previously thought. . .

(*Id.* ¶ 20, Ex. 19; *see also* Doc. No. 337 (“Tanner Decl.”) ¶¶ 1, 2.)³ Along with the synopsis was an illustration showing the “General Premise” of Wilson Wolf's technology that represented:

Upper, outer side of device, usually gas impermeable solid material . . .

³ Corning's HYPERStack Cell Culture Vessel (“HYPERStack”) was developed years after the HYPERFlask, by a different Corning team. (Tanner Decl. ¶ 12.)

Sub-compartment upper surface is dialysis membrane . . . Cells . . . Sub-compartment lower surface, outer side of device is solid material for adherent cells . . . Sub-compartment lower surface, outer side of device is gas permeable material with suspension cells. . . Another surface is gas permeable material (i.e., side) when cells are adherent.

(Young Decl. I ¶ 21, Ex. 20.) Corning ultimately concluded that the multi-layer flask design represented a “Large” “\$ opportunity.” (*Id.* ¶ 28, Ex. 27.)

Also in early-to-mid 2004, Corning was in the early stages of discussion with The Automation Partnership (“TAP”), a UK company that manufactures automated cell culture systems, including one called the SelecT. (*Id.* ¶ 22, Ex. 2.) These discussions related to potential new designs for cell culture vessels that could deliver a “step change,” for example, a 10-20 times increase in cell yield in a vessel with the same footprint as a T175 flask. (Walsh Dep. at 75-6.) On August 27, 2004, Corning held a conference call with TAP on “collaborative opportunities,” during which they discussed the use of gas permeable materials, in combination with other cell culture vessel features, such as an expanded surface area. (Young Decl. I ¶¶ 24, 25, Exs. 23, 24.)

Corning began work on a cell-culture product aimed at delivering the “step change” for TAP. The development began on September 1, 2004, with a TAP SelecT brainstorming session that addressed, in part, Wilson Wolf’s gas permeable product concepts (including that “Wilson Wolf has IP on a number of concepts”) and the opportunity presented by Wilson Wolf’s multi-layer flask. (*Id.* ¶¶ 26-28, Exs. 25-27.) Corning referred to the new TAP product as HDCCV (High Density Cell Culture Vessel) and later the HYPERFlask.

Throughout this time frame, Wilson Wolf continued to provide Corning with

Confidential Information related to Wilson Wolf product concepts and designs. For example, no later than October 26, 2004, Wilson sent Corning a confidential copy of the '651 Provisional Application. (*Id.* ¶ 33, Ex. 32.)

After receiving additional information from Wilson Wolf, Corning requested another in-person meeting with Wilson, which took place on December 10, 2004. (Young Decl. II ¶ 4, Ex. 64; Young Decl. I ¶ 36, Ex. 35.) Four representatives, including Dr. Tanner, attended on behalf of Corning. (*Id.*) The agenda included the product specific discussion of the “10X yield device.” (Young Decl. I ¶ 38, Ex. 37.) Plaintiffs assert that, at this meeting, Wilson also revealed portions of a confidential Wilson Wolf Small Business Innovation Research (“SBIR”) grant application that related to an islet cell culture device. (*Id.* ¶ 57, Ex. 56 (“Welch Dep.”) at 142; *Id.* ¶ 7, Ex. 6.) Wilson claims that the application describes specific preferred embodiments of a cell culture device with multiple gas permeable shelves, each with a gas space or a gas compartment below it. (Wilson Decl. ¶ 6.) Wilson submits that the '651 Provisional Patent Application describes the concepts of the device in the SBIR application, but does not expressly disclose the particular device configuration. (*Id.*)

In mid-December 2004, Corning began holding regular meetings of the “TAP Team.” (Young Decl. I ¶ 39, Ex. 38.) Plaintiffs assert that they were not aware of the TAP Team or that Corning was developing a product with TAP. In January 2005, Corning reported “Collaboration Activity” with Wilson Wolf on the “HDCCV/10XFlask.” (*Id.* ¶ 42, Ex. 41.) On or around January 5, 2005, Corning and TAP entered into a “DEVELOPMENT/EVALUATION AGREEMENT,” the goal of

which was the design and development of “a cell culture vessel that is optimized for use in a TAP automated cell cultures system.” (Young Decl. II ¶ 7, Ex. 67.) The vessel was referred to as the “HDCCV/10X Flask” project. (Young Decl. I ¶¶ 40-42, Exs. 39-41.) The goal was to develop a HYPERFlask that was “in that 10X range.” (Young Decl. II ¶ 69, Ex. 68 (“Wall Dep.”) at 41-44.) Tanner acknowledged that Wilson Wolf played a role in the development of the HDCCV. (*Id.* ¶ 70, Ex. 69.)

On January 5, 2005, Wilson Wolf provided Corning a confidential “Wilson Wolf Flask Retail Price Analysis.” (*Id.* ¶¶ 43, 44, Exs. 42, 43.) As Corning continued to work with Wilson Wolf on the HDCCV Project, it continued to communicate simultaneously, but separately, with the TAP Team: “We will be developing in house prototypes and experiments, as well as using data from the WWMfg prototypes to answer [] questions. Corning will begin experiments 1 day following the onset of experiments by WWMfg, and communicate daily about the procedures.” (*Id.* ¶ 40, Ex. 39.)

TAP Team meeting minutes in early February 2005 describe the use of experimental protocols for testing Wilson Wolf prototypes and Corning’s construction of its own prototypes, including multilayered vessels with gas permeable materials and tracheal openings, and vessels with 9 plates (for 10 growth surfaces) providing an increase in total cell growth surface area. (*Id.* ¶ 47, Ex. 46.) Also in early February, Corning expressed concern about Wilson Wolf’s intellectual property: “Team members have concerns regarding potential conflicts with WWMfg IP.” (*Id.*)

In March 2005, Corning decided that it would not work with Wilson Wolf. (*Id.* ¶ 49, Ex. 48 (“. . . we will not be testing [Wilson’s] prototypes”)). Also in a letter to

Wilson dated May 13, 2005, Corning explained that “we have elected not to proceed with the development of a new vessel that would make use of Wilson Wolf’s technology at this time.” (*Id.* ¶ 52, Ex. 51.)

Corning continued to work on its own prototypes of cell culture devices that used gas permeable materials but did not include a gas/liquid interface. (*Id.* ¶ 53, Ex. 52.) By early April, Corning concluded that it “favor[ed] moving in the direction of having a gas permeable material somewhere on the vessel.” (*Id.*) On April 20, 2005, Corning held an HDCCV Review which identified the business and technical justification for the products that later became HYPERFlask and HYPERStack. (*Id.* ¶ 55, Ex. 54.) On April 22, 2005, the TAP Technical team met to discuss, among other things, the HDCCV project review, which involved a discussion of product concepts, including the “Multi-Layer Flask with External [Gas Permeable Membrane].” (*Id.* ¶ 51, Ex. 50.) In his deposition, Greg Martin (“Martin”), a Senior Product Development Engineer at Corning, testified that he believed that the multi-layer flask referred to Wilson’s prototype. (Young Decl. I ¶ 10, Ex. 70 (“Martin Dep.”) at 251-52.)⁴

On April 28, 2005, Corning TAP Technical Team Project Leader, Ron Verkleeren, gave a presentation to TAP in England about the HDCCV project. The presentation included a PowerPoint discussing “Current Product Concepts,” including the

⁴ Martin later stated in his declaration that his deposition testimony on this point was speculation. (Doc. No. 338 (“Martin Decl.”) ¶ 43.) Martin’s declaration states that he had not seen that particular “‘wrapped’ cell culture flask with gas permeable material on all sides . . . in any of the documents that John Wilson provided to Corning” and that he “had not seen any prototype of that wrapped flask from John Wilson or Wilson Wolf.” (*Id.*)

“Multi-Layer Flask with External [Gas Permeable Membrane].” (Young Decl. II ¶ 11, Ex. 71.) The Power Point included a slide showing and describing the Multi-Layer Flask with External GPM, which Plaintiffs submit is the same product referred to by Corning as the “Wilson Wolf Flask.” (*Compare id.* at COR005150 with *id.* ¶ 2, Ex. 62 at COR005179.)

DISCUSSION

I. Summary Judgment

Summary judgment is proper if there are no disputed issues of material fact and the moving party is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(a). The Court must view the evidence and the inferences that may be reasonably drawn from the evidence in the light most favorable to the nonmoving party. *Weitz Co., LLC v. Lloyd's of London*, 574 F.3d 885, 892 (8th Cir. 2009); *Bai v. L & L Wings, Inc.*, 160 F.3d 1350, 1353 (Fed. Cir. 1998). The moving party bears the burden of showing that there is no genuine issue of material fact and that it is entitled to judgment as a matter of law. *Enter. Bank v. Magna Bank of Mo.*, 92 F.3d 743, 747 (8th Cir. 1996). A party opposing a properly supported motion for summary judgment may not rest upon mere allegations or denials, but must set forth specific facts showing that there is a genuine issue for trial. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 256 (1986). As the United States Supreme Court has stated, “[s]ummary judgment procedure is properly regarded not as a disfavored procedural shortcut, but rather as an integral part of the Federal Rules as a whole, which are designed ‘to secure the just, speedy, and inexpensive determination of

every action.’’ *Celotex Corp. v. Catrett*, 477 U.S. 317, 327 (1986) (quoting Fed. R. Civ. P. 1).

II. Plaintiffs’ Motion

Plaintiffs move for summary judgment on their claims for breach of contract and to correct the inventorship of the ’209 Patent.

A. Breach of Contract

In Count IV, Plaintiffs assert a claim for breach of contract. (Compl. ¶¶ 125-35.) In support, Plaintiffs contend that Corning breached the terms of the CDA by disclosing Wilson Wolf’s Confidential Information to TAP.⁵ (*Id.*)

Under Minnesota law, the elements of a breach of contract claim are:

(1) formation of a valid contract; (2) performance of conditions precedent by the plaintiff; and (3) breach of the contract by the defendant. *Lyon Fin. Servs., Inc. v. Ill. Paper & Copier Co.*, 848 N.W.2d 539, 543 (Minn. 2014). Here, there is no dispute that the CDA is a valid contract.

As to the second and third elements, Plaintiffs point to evidence that Corning disclosed the multi-layer flask in documents that were marked Confidential. Plaintiffs assert that, under the CDA, once Wilson Wolf disclosed that design information designated as Confidential, Corning was obligated to protect the information from disclosure to third parties. Plaintiffs further argue that Corning breached the CDA by

⁵ Plaintiffs also argue that Corning’s use of Wilson Wolf’s Confidential Information to develop its own HYPERFlask and HYPERStack products constitutes a breach of the CDA, but Plaintiffs do not move for summary judgment on that basis. Instead, Plaintiffs reserve the right to present evidence of such a breach at trial.

disclosing the information to TAP. Specifically, Plaintiffs point to record evidence that Corning disclosed information regarding the multi-layer flask to TAP in the April 28, 2005 PowerPoint presentation. Plaintiffs also point out that Corning did not provide notice to Wilson Wolf that it was going to reveal the design of the multi-layer flask to TAP. Plaintiffs contend that Corning's actions constitute a breach of the CDA as a matter of law and that Wilson Wolf is entitled to summary judgment on its breach of contract claim.

Corning opposes Plaintiffs' motion and asserts that there are disputed questions of fact and other issues that preclude summary judgment on this claim. First, Corning points out that Wilson Wolf discusses four different Wilson Wolf cell culture device designs in its motion: Wilson Wolf's Enhanced Roller Bottle ("WW Flask")—with gas permeable material only on one side of the device (side); Wilson Wolf's Vertical Bag—with gas permeable material on only one side of the device (bottom); a "wrapped" flask design—with gas permeable material on all sides; and the "tracheal" design—with multiple cell culture chambers, each with its own gas permeable membrane, divided by interior ("tracheal") spaces.

Corning submits evidence that the flask design ("Multi-Layer Flask with External GPM") that it shared with TAP on April 28, 2005 was a "wrapped" flask design. Corning further submits that the "wrapped" flask design is not Wilson Wolf's proprietary design, but that all non-public designs that Wilson Wolf shared with Corning had gas permeable material on a single side, and that Wilson Wolf's claimed expertise was growing cells using only a limited amount of gas permeable material. (*See, e.g.*, Doc.

No. 339 (“Upton Decl.”) ¶ 18 (“No design from Wilson Wolf included multiple cell culture chambers, each with a gas permeable bottom, or air passages in the interior of the vessel body, as included in Dr. Tanner’s and Mr. Martin’s tracheal design.”). Corning maintains that there is evidence in the record that demonstrates that the design shown to TAP did not reflect Wilson Wolf’s alleged expertise, and that the design actually arose from Dr. Todd Upton (“Dr. Upton”), a Corning scientist. (*Id.* ¶¶ 13-16.)⁶

Second, Corning argues that the documents upon which Wilson Wolf relies to demonstrate that it designated as Confidential the design that Corning shared with TAP do not actually depict the “wrapped design,” but rather, the documents marked under the CDA depict a different design. (*See* Young Decl. I, ¶ 6, Ex. 5 at WW 000468; *id.* ¶ 13, Ex. 12 at COR 009309-10.) Thus, Corning submits that Wilson Wolf cannot claim protection of the design Corning shared with TAP.

Finally, Corning contends that, even assuming that the “wrapped design” it shared with TAP was proprietary to Wilson Wolf and that Wilson Wolf had designated that design as Confidential under the CDA, Wilson Wolf has not pointed to any evidence of damage that is traceable to Corning’s disclosure of the design to TAP. In particular, Corning submits that Wilson Wolf has not pointed to any evidence that the “wrapped

⁶ Plaintiffs challenge Corning’s key factual assertion, namely that Corning only disclosed the “wrapped” design to TAP, on the ground that the only evidence for this assertion comes from witness declarations that are based on speculation and contradict documentary and testimonial evidence. The disputes regarding these witnesses’ testimony and personal knowledge of what was disclosed to TAP are appropriate for a jury to consider and decide.

design” was ever commercialized by any party. Indeed, Corning submits that the designs that Wilson Wolf shared with Corning did not work and that Corning chose to go with its own “tracheal” design, which later became the basis for its HYPERFlask and HYPERStack products and the ’209 Patent.

Viewing the record in the light most favorable to Corning, the Court concludes that there are numerous issues of material fact that preclude summary judgment on Wilson Wolf’s breach of contract claim. These factual issues include disputes as to who originated the flask design that Corning shared with TAP, whether that flask design was designated as Confidential under the CDA, and whether Corning disclosed any Confidential Information to TAP.⁷ Based on these significant factual disputes, summary judgment in favor of Wilson Wolf on its Breach of Contract claim is improper. Accordingly, the Court denies Wilson Wolf’s motion as to this claim.

B. Inventorship of the ’209 Patent

In Count I of the Complaint, Plaintiffs assert a claim for Declaratory Judgment of Invalidity, or Correction of Inventorship, Regarding the ’209 Patent (35 U.S.C. §§ 102, 256). (Compl. ¶¶ 101-124.) Plaintiffs maintain that Wilson should be properly named as the sole inventor of the ’209 Patent, but move only to name Wilson as a co-inventor of

⁷ In addition, Corning submits that the CDA allows for the disclosure of Wilson Wolf’s designs, so long as Corning protects the designs as it would their own confidential information. (See CDA ¶ 3(a).) Corning has also submitted evidence that all disclosures to TAP involved a nondisclosure agreement. (Doc. No. 336 (“Barron Decl. II”) ¶ 13, Ex. 91.) This raises additional factual issues that must be resolved at trial.

the '209 Patent at this time. Wilson reserves the right to further correct inventorship or for a declaration of invalidity at trial.

The '209 Patent is titled "Multi-Layered Cell Culture Apparatus." (Young Decl. II ¶ 12, Ex. 72.) The '209 Patent lists two inventors—Gregory R. Martin and Allison J. Tanner—and is assigned to Corning. (*See id.*) Relevant to this motion, claim 16 of the '209 Patent covers:

16. A cell growth apparatus comprising:
 at least one cell growth chamber having a gas permeable, liquid impermeable membrane, an opposing surface, and at least one side wall connected to at least one of the gas permeable, liquid impermeable membrane and the opposing surface;
 at least one tracheal space in communication with at least one gas permeable, liquid impermeable membrane of the at least one cell growth chamber;
 wherein the at least one tracheal space comprises peripheral supports on a peripheral edge of the tracheal space to support the gas permeable, liquid impermeable membrane;
 wherein the supports on the peripheral edge of the tracheal space are spaced apart to create a plurality of gaps to allow gasses to flow from an external environment into the tracheal space through the plurality of gaps between peripheral supports; and
 wherein the at least one tracheal space is an air space in communication with the external environment.

(*Id.* at claim 16.) The Court construed the term "tracheal space" to mean "a space that allows gas communication." (Doc. No. 299 at 14.)

Corning opposes Wilson Wolf's motion on inventorship. Instead, Corning asserts that record evidence demonstrates that the device reflected in claim 16 of the '209 Patent was independently conceived and reduced to practice by Dr. Tanner and Martin, not Wilson.

A patented invention may be the work of two or more joint inventors. *Ethicon, Inc. v. U.S. Surgical Corp.*, 135 F.3d 1456, 1460 (Fed. Cir. 1998). However, “[p]atent issuance creates a presumption that the named inventors are the true and only inventors.” *Id.* Omitted co-inventors “must prove their contribution to the conception of the claims by clear and convincing evidence.” *Id.* at 1461. Because conception is the touchstone of inventorship, each inventor must generally contribute to the conception of the invention. *Id.* Conception is the “formation in the mind of the inventor, of a definite and permanent idea of the complete and operative invention, as it is hereafter to be applied in practice.” *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1376 (Fed. Cir. 1986) (citation omitted).

[T]he test for conception is whether the inventor had an idea that was definite and permanent enough that one skilled in the art could understand the invention; the inventor must prove his conception by corroborating evidence, preferably by showing a contemporaneous disclosure. An idea is definite and permanent when the inventor has a specific, settled idea, a particular solution to the problem at hand, not just a general goal or research plan he hopes to pursue.

Burroughs Wellcome Co. v. Barr Labs., Inc., 40 F.3d 1223, 1228 (Fed. Cir. 1994) (citations omitted).

A joint invention is the product of a collaboration between two or more persons working together to solve the problem addressed. People may be joint inventors even though they do not physically work on the invention together or at the same time, and even though each does not make the same type or amount of contribution. The statute does not set forth the minimum quality or quantity of contribution required for joint inventorship.

Id. at 1227 (citations omitted). While “[i]nventorship is a question of law,” it is “based on underlying facts.” *Univ. of Pittsburgh v. Hedrick*, 573 F.3d 1290, 1297 (Fed. Cir. 2009) (citation omitted).

Here, Plaintiffs contend that Wilson conceived of the subject matter of at least claim 16 of the ’209 Patent before Martin and Dr. Tanner claim to have done so. Plaintiffs assert that the subject matter of claim 16 is reflected in both the ’651 Provisional Application, and that Wilson’s conception of the claimed elements is established by Wilson Wolf’s Vertical Bag prototypes (which Plaintiffs claim are embodiments of Figure 2 of the ’651 Provisional Patent Application). Plaintiffs further point to evidence that both the ’651 Provisional Patent Application and Vertical Bag Prototypes were sent to Corning. Thus, Plaintiffs maintain that the evidence shows that Wilson conceived of these elements of claim 16 and communicated these elements to Corning staff before Corning filed the application that issued as the ’209 Patent. Plaintiffs also point to evidence that Corning contacted Wilson in June 2005 to ask him if he was willing to be listed as an inventor on a Corning Patent application as an admission that Wilson is, at a minimum, a co-inventor.

Corning, on the other hand, argues that the record evidence demonstrates that the device reflected in claim 16 of the ’209 Patent was independently conceived and reduced to practice by Dr. Tanner and Martin, the named inventors. First, Corning submits evidence that Wilson cannot identify when the device (a prototype of the Vertical Bag) pictured in documents relied on by Plaintiffs was created or whether that particular prototype was actually given to Corning. (See Bannon Decl. II ¶ 5, Ex. 83 (“Wilson

30(b)(6) Dep.”) at 28-29.) Moreover, Corning contends that Wilson has failed to point to corroborated evidence that the Vertical Bag design was communicated to the inventors of claim 16, Dr. Tanner and Martin. Instead, Corning submits that the analysis of the Vertical Bag was done by Dr. Upton at Corning, who is not a named inventor of the ’209 Patent. (Upton Decl. ¶¶ 4-12.) In addition, Corning claims that the record demonstrates that neither Dr. Tanner nor Martin was involved in any test of the Vertical Bag. (Tanner Decl. ¶¶ 23, 35; Martin Decl. ¶¶ 32-40.) Rather, Corning asserts that the Wilson Wolf design that Dr. Tanner and Martin reviewed during their work on this project was the Wilson Wolf Flask with gas permeable material on one “sidewall,” a design upon which Wilson does *not* rely in support of his inventorship claim.

Corning also points to evidence that Corning claims demonstrates that Dr. Tanner and Martin had already conceived of their “tracheal flask” design by the time they learned about Wilson Wolf and that their tracheal design is different from anything Wilson provided to Corning, including the Vertical Bag design. (Bannon Decl. II ¶ 9, Ex. 87 (“Tanner Dep.”) at 59-62; *id.* ¶ 10, Ex. 88 (“Martin Dep.”) at 47-50.) Finally, Corning submits that the inventive features of claim 16 are not found in Wilson Wolf’s Vertical Bag. As to this argument, Corning submits that the prior art on gas permeable cell culture devices is dense and that Wilson Wolf has failed to establish that Wilson contributed to the inventive subject matter of the ’209 Patent, as opposed to showing that Wilson’s design and the ’209 Patent shared common elements found in the prior art.

After carefully reviewing the record and considering the parties’ respective arguments, the Court concludes that there are numerous material issues of fact regarding

the question of inventorship. These issues of material fact include questions as to who conceived of the claimed inventive subject matter of the '209 Patent. The record evidence does not, at this juncture, constitute clear and convincing evidence such that a reasonable jury could *only* conclude that Wilson conceived (alone or in conjunction with scientists at Corning) of the inventive subject matter. Accordingly, Plaintiffs' motion for summary judgment on inventorship is properly denied.

III. Corning's Motion

A. Unjust Enrichment

In Count V, Plaintiffs assert a claim for unjust enrichment. (Compl. ¶¶ 136-40.) Plaintiffs allege that Corning was unjustly enriched by its unlawful and unauthorized use of Wilson Wolf technology. (*Id.*) Corning now moves for summary judgment on this equitable claim.

Under Minnesota law, unjust enrichment is an equitable remedy that plaintiffs may not pursue where “the rights of the parties are governed by a valid contract.” *U.S. Fire Ins. Co. v. Minn. State Zoological Bd.*, 307 N.W.2d 490, 497 (Minn. 1981); *see also Southtown Plumbing, Inc. v. Har-Ned Lumber Co., Inc.*, 493 N.W.2d 137, 140 (Minn. Ct. App. 1992) (explaining that relief under theory of unjust enrichment is not available where there is an adequate remedy at law).

Defendants argue that a valid contract—the CDA—governs this dispute, and that equitable relief is therefore unavailable. Plaintiffs, however, maintain that their unjust enrichment claim is properly before the Court, notwithstanding Plaintiffs' breach of contract claim. First, Plaintiffs assert that they have no adequate remedy at law for

Corning's breach of the restrictive covenants. Second, Plaintiffs contend that they have the right to plead alternative theories of relief.

Here, the validity of the CDA is not in dispute. The CDA comprehensively governs the exchange of information between the parties, and in their Complaint, Plaintiffs seek damages for breach of the CDA. (Compl. at Prayer for Relief.) Indeed, Plaintiffs assert that Corning "obtained valuable patent applications and patents through its unlawful and unauthorized use of information disclosed by Wilson Wolf *pursuant to the [CDA].*" (*Id.* ¶ 138 (emphasis added).) Because the CDA governs the parties' dispute, the Court finds that there is no legal justification for Plaintiffs' claim of unjust enrichment. *See Caldas v. Affordable Granite & Stone, Inc.*, 820 N.W.2d 826, 838 (Minn. 2012) (holding that unjust enrichment "does not apply when there is an enforceable contract that is applicable").

Plaintiffs also argue that because Wilson is not a party to the CDA, summary judgment cannot be entered against him. The Court disagrees. First, it is apparent from the allegations in the Complaint that Plaintiffs' unjust enrichment claim is based on Corning's use of Wilson Wolf technology, not Wilson's technology. (Compl. ¶ 137 ("Corning has been unjustly enriched by its unlawful and unauthorized use of Wilson Wolf technology.").) Second, Plaintiffs have not pled an individual unjust enrichment claim on behalf of Wilson.

Accordingly, summary judgment as to Plaintiffs' unjust enrichment claim is appropriate.

B. Trade Secret

In Count VI, Plaintiffs assert a claim for Misappropriation of Trade Secrets under Minn. Stat. § 325C.01. (Compl. ¶¶ 141-63.) In support, Plaintiffs allege that they disclosed Wilson Wolf's gas permeable cell culture technology to Corning, and that this information was closely guarded and constituted trade secret information. (*Id.* ¶¶ 142-44.) Plaintiffs further allege that Corning misappropriated Wilson Wolf's trade secrets by: (1) including them in provisional and utility patent applications, thereby disclosing the trade secret information to the public; and (2) obtaining allowance of claims that cover Wilson Wolf's trade secrets. (*Id.* ¶¶ 149-54.)

Defendants move for partial summary judgment on Plaintiffs' trade secret claim for all alleged misappropriations that occurred after Plaintiffs' patent applications (resulting in the '426 and '427 Patents) published on April 21, 2005.⁸ In support, Defendants contend that: (1) under the CDA, any alleged trade secrets were required to be identified in writing in order to be protected; (2) all the trade secrets that Corning allegedly misused are contained in Plaintiffs' patent applications; and (3) once Plaintiffs' patent applications (containing the alleged trade secret information) were published on April 21, 2005, the information was no longer secret.

Plaintiffs oppose Defendants' motion, arguing that Corning used information designated confidential by Wilson Wolf to develop its HYPERFlask and HYPERStack

⁸ Corning acknowledges that Plaintiffs are free to continue to pursue their trade secret misappropriation claim for alleged appropriation that occurred before April 21, 2005. (Doc. No. 318 at 8.)

products. Plaintiffs further assert that the Wilson Wolf patent applications did not disclose all of the trade secret information that Corning needed to develop and commercialize their products. For example, Plaintiffs assert that their trade secrets included other device embodiments, market assessments, retail value assessments, raw cost assessments, and detailed descriptions of various product opportunities, including for multi-layered flasks. (Barron Decl. I ¶ 11, Ex. 10 at 15.)

Minnesota's Trade Secrets Act requires that a party seeking protection show both the existence and the misappropriation of a trade secret. *Electro-Craft Corp. v. Controlled Motion, Inc.*, 332 N.W.2d 890, 897 (Minn. 1983). In order for information to be considered a "trade secret," Plaintiffs must establish that: (1) the information is not generally known or ascertainable; (2) the information derives independent economic value from secrecy; and (3) they made reasonable efforts to maintain the information's secrecy. *Id.* at 899-901.

As an initial matter, Plaintiffs argue that the misappropriation of their trade secrets is wrongful regardless of whether the information was published on April 21, 2005. In support, Plaintiffs rely on *Cherne Indus., Inc. v. Grounds & Assocs., Inc.*, 278 N.W.2d 81 (Minn. 1979):

Where the information has, subsequent to the wrongful taking and use, become generally available, the initial conduct is still wrongful and the [owner of the trade secret information] is still entitled to relief for any injury suffered as a result of the wrongful use.

Id. at 92. Plaintiffs state that "it appears that Corning is attempting to argue that a party suffering from another's taking and use of its trade secrets loses any remedy for that

wrongful conduct if the trade secrets ever become available, even after the misappropriator's use." (Doc. No. 313 at 42.) Corning, however, clarified that it "does not contend that the publication of the patent application frees Corning from all claims for trade secret misappropriation. Rather . . . Corning seeks partial summary judgment that there was no misappropriation after April 21, 2005. . . . Wilson Wolf is free to continue to argue that Corning allegedly misappropriated Wilson Wolf's trade secrets before April 21, 2005." (Doc. No. 313 at 8.) Thus, Defendants' motion does not address Plaintiffs' ability to seek relief for acts that occurred prior to April 21, 2005.

Corning maintains that no act by it after April 21, 2005, can constitute trade secret misappropriation and moves for partial summary judgment on any such claim. In particular, Defendants argue that the introduction of its HYPERFlask and HYPERStack products, as well as the filing and issuance of the Corning patents all occurred *after* Plaintiffs' patents were published, and therefore those actions cannot constitute trade secret misappropriation. The Court agrees that, to the extent that Plaintiffs' asserted trade secrets are contained in the patents that were published on April 21, 2005, there can be no claim for misappropriation for use that occurs after publication. Plaintiffs, however, assert that not all of Wilson Wolf's trade secrets were published in their patent applications, and that those particular trade secrets remain secret. The Court therefore considers whether Plaintiffs have asserted a trade secret claim for information not contained in their patent applications.

The Court first notes that, in this litigation, Plaintiffs have represented that their trade secret claim is based on information contained in their patent applications. (See,

e.g., Barron Decl. I ¶ 8, Ex. 7 at 22.) Specifically, in their response to interrogatories, Plaintiffs were asked whether any information that forms the basis for Plaintiffs' claims (including trade secret misappropriation) was published or disclosed prior to the expiration of the CDA. (*Id.* at 21-22.) In response, Plaintiffs indicated that it disclosed "such information" in their patent applications. (*Id.* at 22.) In addition, in filings related to other motions in this case, Plaintiffs have not indicated that there are relevant trade secrets outside of their patents.

Even accepting that Plaintiffs have fairly alleged that they disclosed trade secret information outside of the information published in its patents, the Court concludes that Plaintiffs have not identified any such particular trade secret with sufficient specificity. Plaintiffs vaguely recite alleged trade secret information that was not disclosed in Plaintiffs' patents: "other specific device embodiments, market assessments, retail value assessments, raw cost assessments, and detailed descriptions of various product opportunities, including for multilayered flasks." (Doc. No. 313 at 22 (*citing* Barron Decl. I, ¶ 11, Ex. 10 at 15).) Such a recitation, however, does not meet the burden of establishing that any of the above information meets the legal standard for trade secret protection. Merely stating that the information is confidential is not enough, and Plaintiffs have not made any showing that any particular piece of information listed above had independent economic value due to its secrecy, was not readily ascertainable, and that Plaintiffs took efforts to maintain its secrecy. *See Electro-Craft*, 332 N.W.2d at 899-901. Moreover, Plaintiffs have not adequately separated out allegedly secret information that is not also disclosed in its patents. Here, the Court concludes that

Plaintiffs have not established the existence of a trade secret that is separate from the information disclosed in their patents. And, without a trade secret, there can be no claim for misappropriation. *Id.* at 897.

Based on the above, the Court concludes that Plaintiffs' trade secret misappropriation claims cannot be based on alleged misappropriation after April 21, 2005, and the Court grants summary judgment accordingly.

ORDER

Based upon the foregoing, and the files, records, and proceedings herein, **IT IS HEREBY ORDERED** that:

1. Plaintiffs' Motion for Partial Summary Judgment Regarding (1) Breach of Contract and (2) Incorrect Inventorship Regarding U.S. Patent No. 7,745,209 (Doc. No. [320]) is **DENIED**.
2. Defendant's Motion for Summary Judgment on Plaintiffs' Unjust Enrichment Claims and Partial Summary Judgment on Plaintiffs' Trade Secret Misappropriation Claims (Doc. No. [307]) is **GRANTED** as follows:
 - a. Plaintiffs' Unjust Enrichment claim is **DISMISSED WITH PREJUDICE**.
 - b. Plaintiffs' trade secret misappropriation claim is **DISMISSED WITH PREJUDICE** to the extent that the claim is based on alleged misappropriation after April 21, 2005.

Dated: March 22, 2016

s/Donovan W. Frank
DONOVAN W. FRANK
United States District Judge